

PATENT COOPERATION TREATY

PCT

ANKOM

INTERNATIONAL SEARCH REPORT

2005 -05- 2 0

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference MH/LB 53936	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/SE 2005/000231	International filing date (day/month/year) 21 February 2005	(Earliest) Priority Date (day/month/year) 20 February 2004
Applicant INDEX PHARMACEUTICALS AB et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☒ Certain claims were found unsearchable (see Box No. II)

3. ☐ Unity of invention is lacking (see Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 3

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE 2005/000231

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - ☒ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☒ in written format
 - ☒ in computer readable form
 - c. time of filing/furnishing
 - ☒ contained in the international application as filed
 - ☒ filed together with the international application in computer readable form
 - ☐ furnished subsequently to this Authority for the purposes of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/SE 2005/000231**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1-31
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 1, 3-8, 13-18, 20-23, 27-29, 32-38, 44
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

See extra sheet.

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

Box II.I.

Claims 1-31 relate to a method of treatment of the human or animal body by surgery or by therapy, as well as diagnostic methods /Rule 39.1(iv). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compositions.

Box II.2

Present claims 1-8, 13-23, 27-29, 32-38, 44 relate to a compound defined by reference to a desirable characteristic or property, namely "an NF-kappaBp65 inhibitor". The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and / or disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the compounds described in claims 9-12, 24-26, 30, 31, 40-43, 45, 46.

Further, the search has covered the general aspects of the invention to some extent, although it lacks the necessary precision in the definition of the subject matter. Consequently, the search for the general concept of "an NF-kappaBp65 inhibitor" will retrieve a pertinent document only if this concept is described in general terms in a reference. Specific solutions previously known and falling under the general concept - but failing to mention this fact - are likely not to be revealed in such a search.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2005/000231

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C12N 15/11, A61K 48/00, A61K 38/00, A61P 9/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C12N, A61K, A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, MEDLINE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Journal of cerebral flow and Metabolism 2001, Vol.21, Nr2;Chiung-Ying Huang et al; "SOD 1 Down-regulates Nf-kappaB and c Myc expression in mice after transient focal cerebral ischemia" abstract, page 165-169 --	1-46
X	WO 03041640 A2 (THE GENERAL HOSPITAL CORPORATION), 22 May 2003 (22.05.2003), page 2, line 1 - line 20; page 5, line 16; page 6, line 16 --	1-46

☒ Further documents are listed in the continuation of Box C.
 ☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

10 May 2005

Date of mailing of the international search report

19 -05- 2005

Name and mailing address of the ISA/

Swedish Patent Office

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2005/000231

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9747325 A1 (KAROLINSKA INNOVATIONS AB), 18 December 1997 (18.12.1997), page 12, line 1 - line 15, abstract	2,9-12,24-26
A	--	1,3-8,13-23, 27-39,44-46
X	WO 03070918 A2 (RIBOZYME PHARMACEUTICALS, INCORPORATED), 28 August 2003 (28.08.2003), page 135, SEQ ID NO 119, SEQ ID NO 120	30,31,45,46
A	--	1-29,32-44
A	US 20010002391 A1 (STEPHEN BRAND ET AL), 31 May 2001 (31.05.2001), claims 1,21,22	1-46
A	US 5994402 A (ORI D. ROTSTEIN ET AL), 30 November 1999 (30.11.1999), claims 1-28	1-46
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INTERNATIONAL SEARCH REPORT

Information on patent family members

01/04/2005

International application No.

PCT/SE 2005/000231

WO	03041640	A2	22/05/2003	US	20030118578 A	26/06/2003

WO	9747325	A1	18/12/1997	AU	3200197 A	07/01/1998
				SE	9602300 D	00/00/0000

INTERNATIONAL SEARCH REPORT

Information on patent family members

01/04/2005

International application No.

PCT/SE 2005/000231

WO	03070918	A2	28/08/2003	AU	2003207708	A	00/00/0000
				AU	2003210895	A	00/00/0000
				AU	2003211058	A	00/00/0000
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				AU	2003213005	A	00/00/0000
				AU	2003213054	A	00/00/0000
				AU	2003213057	A	00/00/0000
				AU	2003213090	A	00/00/0000
				AU	2003213119	A	00/00/0000
				AU	2003213163	A	00/00/0000
				AU	2003213203	A	00/00/0000
				AU	2003215161	A	00/00/0000
				AU	2003215203	A	00/00/0000
				AU	2003215345	A	00/00/0000
				AU	2003216245	A	00/00/0000
				AU	2003216255	A	00/00/0000
				AU	2003216265	A	00/00/0000
				AU	2003216311	A	00/00/0000
				AU	2003216315	A	00/00/0000
				AU	2003216323	A	00/00/0000
				AU	2003216324	A	00/00/0000
				AU	2003217550	A	00/00/0000
				AU	2003217594	A	00/00/0000
				AU	2003219712	A	00/00/0000
				AU	2003219751	A	00/00/0000
				AU	2003219781	A	00/00/0000
				AU	2003219817	A	00/00/0000
				AU	2003219818	A	00/00/0000
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				AU	2003247204	A	00/00/0000
				CA	2455447	A	12/09/2003
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				CA	2456444	A	28/08/2003
				CA	2457528	A	28/08/2003
				CA	2459532	A	28/08/2003
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				EP	1423404	A	02/06/2004
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				EP	1430157	A	23/06/2004
				EP	1432724	A	30/06/2004
				EP	1432725	A	30/06/2004
				EP	1436314	A	14/07/2004
				EP	1442143	A	04/08/2004
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INTERNATIONAL SEARCH REPORT

Information on patent family members

01/04/2005

International application No.

PCT/SE 2005/000231

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				GB	2396155	A	16/06/2004
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				GB	2397818	A,B	04/08/2004
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				US	20040219671	A	04/11/2004
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INTERNATIONAL SEARCH REPORT

Information on patent family members

01/04/2005

International application No.

PCT/SE 2005/000231

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